# REPEALED BY THE WINNIPEG ELECTRICAL BY-LAW NO. 7372/99 FEBRUARY 24, 1999 (effective April 1, 1999)

### THE CITY OF WINNIPEG

# THE WINNIPEG ELECTRICAL BY-LAW NO. 6499/94

# A By-law of THE CITY OF WINNIPEG respecting electrical wiring and other electrical installations.

### NOTE

By-law No. 6499/94 of the CITY OF WINNIPEG is composed of the within publication together with the 17th edition of the Canadian Electrical Code.

### PREFACE

The following By-law adopts the Canadian Electrical Code, Part I, Seventeenth Edition, with certain additions and amendments. For ease of reference, these local amendments have been given a number corresponding to related rules in the Canadian Electrical Code.

The By-law is divided into three Chapters:

- **Chapter 1:** Covers the legal enactment and the adoption of the Code as a By-law.
- **Chapter 2:** Contains all the variations to the Code.
- **Chapter 3:** Is the Canadian Electrical Code, Part I, Seventeenth Edition

When consulting the Code, (i.e. Chapter 3) it is then only necessary to look up the corresponding rule number in Chapter 2 to locate the amendments or additions which may affect the work.

This By-law shall come into effect February 1, 1995.

THE CITY OF WINNIPEG, in Council assembled, enacts as follows:

# Chapter 1

# Legal Enactment and Adoption of the Code as a By-law

# Enactment and Adoption

### 1. **Title**

This By-law may be referred to as "The Winnipeg Electrical By-law".

### 2. Application

No electrical wiring or electrical apparatus shall be installed or electrical current used except as hereinafter provided.

### 3. **Authority**

All construction, the details of which are not specifically dealt with in this By-law, shall be performed to the satisfaction of the Supervisor of Building Inspections. The word "construction" herein means the installation of electrical equipment in or about any building or premises. All electrical equipment installed shall be regarded as part of the "construction" and where details of design in respect of any such equipment are not specified in this By-law but the expression "approved" is used with reference thereto, it shall be understood that no such equipment shall be installed unless the same be satisfactory to the Supervisor of Building Inspections.

# 4. **Interpretation of Terms**

# 1. Where in this By-law:

a. such terms as "proper", "adequate", "sufficient", "ample", "suitable", "substantial", "secure", "necessary", "dangerous" and the like or derivatives thereof, are used, they shall be understood to mean proper, adequate, and so forth to the satisfaction or in the opinion of the Supervisor of Building Inspections, and such terms as "where practicable", "where required", "as far as possible" shall have a like significance; and b. the word "person" is used, it includes any person, firm, copartnership or corporation of any trustee, manager or other person, either individually or jointly with others, owning or occupying any building or place or having the management or supervision of any building or place to which this By-law applies, and shall also include any agent, workman, servant or employee of such person, firm, copartnership, or corporation.

# 5. Inclusion of "Canadian Electrical Code"

Excepting as varied in Chapter 2, of this By-law the rules contained in the Canadian Electrical Code, Part I, Seventeenth Edition, which in this By-law is referred to as "The Code" and referenced as Chapter 3 of this By-law is hereby declared to form a part of this By-law, and any reference to the By-law shall be construed as a reference to the whole By-law inclusive of such rules. Where the expression "Rule 2-008 (or as the case may be) of The Code or Section" followed by a number is used herein, it shall mean respectively the rule or section bearing such number in the said Canadian Electrical Code.

### 6. **Reference to The Code**

- 1. The numbers and letters at the beginning of the sections and rules in Chapter 2 hereof refer to the section or rule correspondingly numbered and lettered in The Code, and where a section or rule appears in said Chapter 2, it shall be construed as if it appeared in its proper place in The Code according to its numbers, or number and letter, as the case may be and any section or rule which appears in Chapter 2 but does not appear in The Code shall be deemed to be incorporated in and shall be construed as though it appeared in its appropriate place in The Code.
- 2. In the event of any conflict, actual or implied, between any rule of The Code and any of the provisions of Chapter 1 and 2, the provisions of Chapters 1 and 2 shall prevail.

### 7. Effective Date and Repeal

- 1. This By-law shall come into effect on February 1, 1995.
- 2. By-law No. 5530/90 is hereby repealed on the date set out in aforesaid Subsection 7(1).

# Chapter 2

# Variations to the 17th Edition of The Canadian Electrical Code, Part I

# Variation to Section 0 of the Code

### **Definitions of Special Terms**

# SECTION 0 OF THE CODE IS HEREBY AMENDED AS FOLLOWS:

1. The following Definitions are hereby deleted:

Acceptable Approved as applied to electrical equipment Electrical Contractor Inspection Department

2. Said Section 0 is hereby further amended by adding thereto the following definition:

**Acceptable** means acceptable to the Supervisor of Building Inspections.

**Accredited Certification Organization** means an organization that has been accredited by the Standards Council of Canada, in accordance with specific criteria, procedures and requirements to operate on a continuing basis, a certification program in a specific subject area (areas).

**Approved** when used with reference to any electrical equipment means:

- i that such equipment has been submitted for examination and testing to an Accredited Certification Organization, that formal certification has been given by the Organization to the effect that the equipment conforms to the appropriate CSA Standards established under the provisions of the Canadian Electrical Code;
- ii that such equipment has been approved by the Minister of Labour of the Province of Manitoba or the Chief Electrical Inspector of the Manitoba Hydro and is also acceptable to the Supervisor of Building Inspections; or

iii that a favourable special acceptance inspection has been carried out by the Supervisor of Building Inspections, and as a result of such inspection, the equipment is acceptable to the Supervisor of Building Inspections

**City** means the City of Winnipeg comprising all lands established under regulations by the Lieutenant Governor in Council pursuant to Subsection 4(1) of the City of Winnipeg Act.

**Designated Employee** means the Supervisor of Building Inspections of The City of Winnipeg or such other person as may be authorized in writing by said Supervisor of Building Inspections, to exercise some, or all of the powers vested in the person holding said position, by this by-law.

**Inspection Department** means the Electrical Section of the Building Inspections Division of the Planning Department.

**Owner** means a person, or agent of a person, who owns, manages or is in possession of land or a building, or who is in receipt of the whole or a part of any rents or profits therefrom, whether the rents and profits are received on the person's own account, or as agent or trustee for another person.

**Person** means any person, firm, co-partnership or corporation or any trustee, manager or other person, either individually or jointly with others, owning or occupying any building or place or having the management or supervision of any building or place to which this By-law applies, and includes any agent, workman, servant or employee of such person, firm co-partnership, or corporation.

**Structure** means anything constructed or erected with a fixed location on or in the ground or attached to something having a fixed location on the ground and including but not limited to the following: building, walls, fences, signs, billboards, poster panels, light standards, swimming pools.

Supervisor of Building Inspection means Designated Employee.

### **General Rule - Administrative**

# SECTION 2 OF THE CODE IS AMENDED BY DELETING THE ADMINISTRATIVE SECTION, RULES 2-000 TO 2-032, AND SUBSTITUTING THEREFORE THE FOLLOWING:

### 2-000 Owner's Responsibility for Design and Inspection

- 1. The owner shall appoint a Professional Engineer, entitled to practice in the Province of Manitoba, who shall be responsible for the preparation of the electrical drawings, supervision of the electrical installation and certification that the installation has been installed in accordance with the applicable by-laws, on the following types of electrical installations:
  - a. High Voltage;
  - b. High buildings as defined by Subsection 3.2.6. of the Manitoba Building Code;
  - c. Buildings where the electrical service requirements exceed 750 KVA;
  - d. Power factor correction of electrical installations, other than individual motor applications; and
  - e. Any other type of installation where it is deemed necessary in the opinion of the Supervisor of Building Inspections.

# 2-002 Engineer's Responsibility

- 1. Where in the opinion of the Supervisor of Building Inspections, the character of the proposed work requires technical knowledge for the preparation of drawings and specifications, as provided in Rule 2-000, the drawings and specifications, shall be prepared, and the construction inspected and certified by a Professional Engineer entitled to practice in the Province of Manitoba.
- 2. Prior to the issuance of a Building Permit or the Electrical Permit where a Building Permit is not required, the responsible Professional Engineer shall submit a certificate to the Supervisor of Building Inspections stating his/their responsibility for the preparation of drawings and specifications and for the inspection of construction to ensure conformity with the accepted plans and specifications and the applicable Sections of the By-law.
- 3. Prior to the issuance of a Building Occupancy Permit or where such is not required upon completion of the work, the responsible Professional Engineer shall submit a certificate stating:

"I hereby certify that I have inspected the construction of the electrical facilities on the subject project and that, to the best of my knowledge, the electrical facilities of this project were constructed in accordance with the accepted plans and specifications and the requirements of the City of Winnipeg Electrical By-law and Building By-law."

4. The responsible Professional Engineer shall sign and seal all the documents referred to in this rule.

# 2-004 Electrical Permit

- 1. An Electrical Permit shall be obtained from the Supervisor of Building Inspections for the construction, connection, reconnection, alteration, repair or extension of any electrical installation, and shall be issued only:
  - a. To a person who holds an Electrical Contractor's License authorizing him to carry on his occupation, trade or business in the City of Winnipeg and the Additional Zone; or
  - b. To a person to do work on a single-family dwelling owned by him and occupied by him only as his domestic domicile provided that he has satisfied the Supervisor of Building Inspections that he is competent to perform such work; or
  - c. To a person to do work on a single-family dwelling owned by him which will be occupied by him upon completion, only as his domestic domicile provided that he has satisfied the Supervisor of Building Inspections that he is competent to perform such work.
- 2. No person shall commence electrical work or permit commencement of electrical work until an electrical permit therefore has been issued by the Supervisor of Building Inspections; the electrical permit shall expire if work is not commenced within six months from the date of issue of the permit and is not reasonably continued without interruption thereafter.
- 3. A permit shall be considered void and all rights under the permit shall be terminated if the negotiable instrument used for payment of the permit fee is returned for any reason.
- 4. All work being carried out under an electrical permit issued prior to the effective date of this By-law shall:
  - a. Be completed in accordance with the previous By-law requirements and any special conditions described on the electrical permit and approved plans; and
  - b. Proceed at a satisfactory rate in the opinion of the Supervisor of Building Inspections.

8

Or the electrical permit may be cancelled, and a new electrical permit shall be obtained before work is continued and all subsequent work shall comply with the provisions of this By-law.

### 2-006 Electrical Contractor's Licenses

- 1. a. Every person, firm, corporation or government department desiring to carry on the work of placing, installing, maintaining, repairing or replacing any electrical equipment in the City of Winnipeg, shall be licensed as an Electrical Contractor.
  - b. A person, some member of the firm, or some official of the corporation or government department intending to operate as an Electrical Contractor shall apply in writing to the Supervisor of Building Inspections for an Electrical Contractor's License and shall meet the licensing requirements herewith set forth.
  - c. Upon satisfying the licensing requirements and paying the licensing and examination fees provided for under Subrules (12) and (13), the person, firm, corporation or government department shall be given an Electrical Contractor's License, enabling such persons, firm, corporation, or government department to carry on electrical work subject to the requirements of this By-law, and the limitations of the license.
- 2. Notwithstanding aforesaid Subrule (1), an Electrical Contractor's License shall not be required for a homeowner who has obtained a permit in accordance with paragraphs (b) or (c) of Subrule (1) of Rule 2-004.
- 3. The holder of an Electrical Contractor's License shall be authorized to obtain permits to perform electrical work within the scope of the license as follows:
  - a. The holder of an Electrical Contractor's License "A" shall be permitted to perform any electrical work governed by the City of Winnipeg By-laws and The Electricians' License Act; and
  - b. The holder of an Electrical Contractor's License "B" shall be permitted to install and maintain electrical facilities in premises owned, leased or managed by the corporation, firm, company or government department holding the license as permitted by the City of Winnipeg By-laws and The Electricians' License Act; and
  - c. The holder of an Electrical Contractor's License "C" shall be permitted to perform limited electrical work as authorized by the Limited Specialized Trade Electrician's License issued under The Electricians' License Act, and the City of Winnipeg By-laws; and
  - d. The holder of an Electrical Contractor's License "D" shall be permitted to install and maintain electrical facilities on premises regulated by the Canada Electrical Safety Regulations of the Canada Labour Code.

- 4. Every person applying for an Electrical Contractor's License shall meet the following requirements:
  - a. To qualify for an Electrical Contractor's License "A" the applicant shall:
    - i Be the holder of a valid and subsisting Journeyman's Electrician's License as required by the Electrician's License Act of the Province of Manitoba; and
    - ii Have passed an examination set out by the Examining Committee;
  - b. To qualify for an Electrical Contractor's License "B", the applicant shall:
    - i Be the holder of a valid and subsisting Journeyman Electrician's License as required by The Electrician's License Act of the Province of Manitoba; and
    - ii Have passed an examination set out by the Examining Committee;
  - c. To qualify for an Electrical Contractor's License "C", the applicant shall:
    - i Be the holder of a limited specialized trade electrician's license, issued under The Electrician's License Act of the Province of Manitoba; and
    - ii Have passed an examination set out by the Examining Committee;
  - d. To qualify for an Electrical Contractor's License "D", the applicant shall be a qualified person, as defined in the Electrical Safety Regulations of the Canada Labour Code.
- 5. There is hereby established an Examining Committee consisting of the Supervisor of Building Inspections, the Chief Electrical Inspector at the City of Winnipeg, and a representative appointed by the Electrical Contractor's Association of Manitoba, which shall:
  - a. Prescribe the subjects on which candidates for the Electrical Contractor's License shall be examined;
  - b. Organize, conduct and supervise the examination of the candidates; and
  - c. Report thereon to the Supervisor of Building Inspections as to the issuance of licenses.
- 6. Every Electrical Contractor shall be responsible for the work of his employees.

- 7. If in the opinion of the Supervisor of Building Inspections, the licensee has violated any provisions of this By-law, and upon review of the facts presented at a hearing, the Supervisor of Building Inspections may revoke, cancel or suspend any license.
- 8. Licenses shall not be transferred or assigned.
- 9. Electrical Contractor's License shall have a term not exceeding one year and shall be renewed on or before December 31 of each year.
- 10. Where an Electrical Contractor's License has not been obtained prior to January 1, through neglect or for any other reason, the fee for the license shall be double the normal rate.
- 11. Where a person fails to renew the Electrical Contractor's License for a period of one or more years after the date of expiry shown on the license last issued, the person shall requalify as set out in aforesaid Subrule (4).
- 12. The examination fee for the Electrical Contractor's License shall be as specified in the Development Fees By-law.
- 13. The annual fee for an Electrical Contractor's License shall be as specified in the Development Fees By-law for the year or fraction thereof for which same is taken.

### 2-008 Electrical Permit Fees

The electrical permit fees shall be as specified in the Development Fees By-law.

# 2-010 Special Requirements

Sections devoted to rules governing particular types of installations are not intended to embody all rules governing these particular types of installations, but cover only those special rules or regulations which are additional to or amendatory of those prescribed in other sections covering installations under ordinary conditions.

### 2-012 Notification Re Inspection

The Inspection Department shall be notified by the electrical contractor that work is ready for inspection at such time or times as will permit inspection being made before any work or portion thereof is concealed.

- 1. Plans and Specifications in duplicate or in greater number if required by the Supervisor of Building Inspections, one copy to be retained by the Supervisor of Building Inspections, shall be submitted by the owner or his agent to, and acceptance obtained from, the Supervisor of Building Inspections before work is commenced on:
  - a. Wiring installations of public buildings, industrial establishments, factories, and other buildings in which public safety is involved; or
  - b. Large light and power installations and the installation of apparatus such as generators, transformers, switchboards, large storage batteries, etc.; or
  - c. Such other installations as may be prescribed by the Supervisor of Building Inspections.

# 2-016 Connection

- (1) No electrical installation, extension, alteration, or addition shall be connected or reconnected to any service or other source of electrical energy by a supply authority, electrical contractor, or other persons, until an electrical permit and authorization to make such connection or reconnection has been obtained from the Supervisor of Building Inspections.
- (2) Notwithstanding Subrule (1), a supply authority shall not require an electrical permit or authorization from the Supervisor of Building Inspections for reconnection in cases where the service has been cut off for non-payment of bills or a change of occupant provided there have been no alterations or additions subsequent to the issuance of the last authorization.

# 2-018 <u>Re-Inspection</u>

The Inspection Department reserves the right to re-inspect any installation if and when it considers such action to be necessary.

# 2-020 Use of Approved Equipment

- 1. Electrical equipment used in electrical installations within the jurisdiction of the Supervisor of Building Inspections shall be approved, and shall be of a kind or type and rating approved for the specific purpose for which it is to be employed.
- 2. Unapproved electrical equipment shall not be connected until approved.

# 2-022 Special Acceptance Inspection

A special acceptance inspection of electrical equipment will be made only when warranted in the opinion of the Supervisor of Building Inspections and shall apply mainly to electrical equipment of other than a regular line of manufacture, electrical equipment built to a customer's order, and electrical equipment manufactured or produced singly or in small quantities.

# 2-024 Powers of Rejection

Even though approval has previously been granted, the Inspection Department may reject, at any time, any electrical equipment under any of the following conditions:

- a. If the equipment is substandard with respect to the sample on which approval was granted; or
- b. If the conditions of use indicate that the equipment is not suitable; or
- c. If the terms of the approval agreement are not being carried out.

# 2-026 Deviation or Postponement

In any case where deviation or postponement of these rules and regulations may be necessary, special permission shall be obtained before proceeding with the work, but this special permission shall apply only to the particular installation for which it is given.

# 2-028 Availability of Work for Inspection

No electrical work shall be rendered inaccessible by lathing, boarding, or other building construction until it has been accepted by the Inspection Department.

# 2-030 Damage and Interference

- 1. No person shall damage any electrical installation or component thereof.
- 2. No person shall cut, break or interfere with any lock or seal used for the purpose of locking or sealing any electrical equipment when the equipment has been locked or sealed by the direction of the Supervisor of Building Inspections unless prior permission has been obtained from the Supervisor of Building Inspections.
- 3. No person shall interfere with any electrical installation or component thereof except that when, in the course of alterations or repairs to non-electrical equipment or structures, it may be necessary to disconnect or move components of an electrical installation, and it shall be the responsibility of the person carrying out the alterations or repairs to ensure that the electrical installation is restored to a safe operating condition as soon as the progress of the alterations or repairs will permit.

### 2-032 Powers of the Supervisor of Building Inspections

- 1. The Supervisor of Building Inspections is responsible for the administration and enforcement of this By-law.
- 2. The Supervisor of Building Inspections may authorize in writing person(s) to exercise some or all of the powers invested in him by this By-law.
- 3. The Supervisor of Building Inspections shall accept any construction or condition that lawfully existed prior to the effective date of this By-law provided that such construction or condition does not constitute an unsafe condition.
- 4. The Supervisor of Building Inspections shall issue a permit when to the best of his knowledge, the applicable conditions as set forth in this By-law and other relevant By-laws of the City have been met.
- 5. The Supervisor of Building Inspections or any of his assistants may enter at all reasonable hours and with the consent of the owner or occupant, but subject to Section 155(1) of the City of Winnipeg Act, any building or premise for the purpose of administering or enforcing this By-law.
- 6. The Supervisor of Building Inspections is empowered to order:
  - a. A person who contravenes this By-law, to comply with the By-law within the time period specified; or
  - b. Work to stop on the structure, or any part thereof;
    - i if such work is proceeding in contravention of the Winnipeg Building By-law, this By-law, or any other condition under which the permit was issued; and/or
    - ii if there is deemed to be an unsafe condition; or
  - c. The removal of any unauthorized encroachment on public property; or
  - d. The removal of any electrical installation or part thereof in contravention of this By-law; or
  - e. The cessation of an occupancy in contravention of this By-law; or
  - f. The cessation of an occupancy in any unsafe condition exists; or
  - g. The correction of any unsafe condition; or
  - h. That work not be covered until it has been inspected and that certain work be inspected during construction.
- 7. The Supervisor of Building Inspections may by written notice require any owner of lands, structures or premises upon or within which is found an electrical installation in which in his opinion;

- a. A condition dangerous to persons or property has developed through hard usage, wear and tear, or as a result of alterations or extension; or
- b. The electrical installation is overloaded, defective or is being misused, to make such changes, or provide such electrical facilities in the electrical installation within a reasonable time as may be necessary to remedy the defective or dangerous condition, or prevent such overloading or misuse.
- 8. The Supervisor of Building Inspections may disconnect, or cause to be disconnected:
  - a. An electrical installation, which in his opinion is of immediate danger to persons or property; or
  - b. An electrical installation, which in his opinion is potentially dangerous to persons or property, and in which the owner has been notified of the condition and has failed to make the necessary repairs within the specified time; or
  - c. Any electrical installation, or equipment that has been connected to any source of supply in violation of the provisions of this By-law.
- 9. When an electrical installation is left in an unfinished condition, or is not in conformity with the provisions of this By-law, the Supervisor of Building Inspection may notify the person making the installation or the owner or occupants of the premises in which the same is made to complete the same or make such alterations as may be necessary within such time and in such manner as the Supervisor of Building Inspections may direct.
- 10. The Supervisor of Building Inspections may require and effect the removal from any premises:
  - a. Of any electrical appliances or wiring, which in his opinion are unsafe; or
  - b. Any dead or unused electrical wires or equipment.
- 11. The Supervisor of Building Inspections may refuse to issue an electrical permit or permits:
  - a. Whenever information submitted is inadequate to determine compliance with the provision of this By-law; or
  - b. Whenever incorrect information is submitted; or
  - c. To any person who has failed to pay any fee due and owing to the City of Winnipeg under this By-law; or
  - d. To any person to do electrical work, if, as a result of such electrical work there may be, in the opinion of the Supervisor of Building Inspections, a violation of another By-law, standard, act or regulation; or
  - e. To any person for any addition, alteration, repair or extension to any wiring system, in, on or through any building or place where the existing wiring is not in accordance with the provisions of this By-law.
- 12. The Supervisor of Building Inspections may cancel any electrical permit if:

### By-law No. 6499/94 ...12

- a. In the Supervisor's opinion, the privileges granted by that permit are being misused; or
- b. There is a contravention of any condition under which the permit was issued; or
- c. The permit was issued in error; or
- d. The permit was issued on the basis of incorrect information; or
- e. In the Supervisor's opinion, the electrical work being carried out is not proceeding at a satisfactory rate.
- 13. If any time the Supervisor of Building Inspections directs any person to do any matter or thing pursuant to this By-law, and such person fails to do such matter or thing within the time stated, the Supervisor of Building Inspections may cause such work to be done or cause the installation to be disconnected forthwith and the cost of such work shall be recoverable as a debt of summary process of law and shall also be a lien upon the said property.
- 14. The Supervisor of Building Inspections may direct that tests of materials, equipment, devices or installation methods be made, or sufficient evidence or proof be submitted at the expense of the owner, where such evidence or proof is necessary to determine whether the material, equipment, device or installation meets the requirements of this By-law.
- 15. Any person deeming himself aggrieved by a decision of the Supervisor of Building Inspections may appeal therefrom to the Committee on Planning and Community Services.
- 16. The Supervisor of Building Inspections shall issue in writing such notices or orders as may be necessary to inform the owner where a contravention of this By-law has been observed.
- 17. The Supervisor of Building Inspections shall answer such relevant questions as may be reasonable with respect to the provisions of this By-law when requested to do so, but except for standard design aids shall refrain from assisting in the laying out of any work and from acting in the capacity of an engineering or architectural consultant.
- 18. In the issuance of a stop work order, the Supervisor of Building Inspections shall issue such order in writing, to the owner of the property involved, or to the owner's agent, or to the person in charge, stating the reason for the order and the conditions under which the work may be resumed.
- 19. Any order or notice required to be served pursuant to this Section shall be sufficiently served if sent by certified or registered mail to the owner at his address as shown on the assessment Roll of the City, or has been posted on the premises affected.

# 2-034 Variations

The Supervisor of Building Inspections may vary or modify any requirement of this By-law, where such modification or variation in the opinion of the Supervisor of Building Inspections, will substantially accomplish the object of this By-law.

# 2-036 Duties of the Owner

- 1. Every owner shall allow the Supervisor of Building Inspections to enter any building or premises at any reasonable time for the purpose of administering and enforcing this By-law.
- 2. Every owner shall make or have made at his own expense tests or inspections as necessary to prove compliance with this By-law and shall promptly file a copy of all such test or inspection reports with the Supervisor of Building Inspections.
- 3. When required by the Supervisor of Building Inspections, every owner shall uncover and replace at his own expense any work that has been covered contrary to an order issued by the Supervisor of Building Inspections.
- 4. The owner of a building structure or property shall maintain the electrical facilities associated with the property in a safe condition.
- 5. When the electrical facilities on a property are in an unsafe condition, the owner shall immediately take all necessary action to put the building electrical facilities in a safe condition.
- 6. All safeguards or devices which are required by the Winnipeg Building By-law or the Winnipeg Electrical By-law, in a building when erected, altered, or repaired shall be maintained in good working order, by the owner.
- 7. Every owner shall ensure that no unsafe condition exists or will exist because of the work being undertaken and not completed, should occupancy exist or occur prior to the completion of any work being undertaken that requires a permit.
- 8. Where a stop work order has been issued by the Supervisor of Building Inspections, the owner, or his contractor, shall stop work immediately, except for the installation or erection of covers or guards so as to be able to maintain the site in a safe condition.
- 9. When required by the Supervisor of Building Inspections, every owner shall provide a letter to certify compliance with the requirements of this By-law and of any permits required.

# 2-038 Duties of the Contractor

- 1. Every contractor shall ensure that all construction safety requirements of this By-law are complied with.
- 2. Every contractor shall ensure that all work is carried out in accordance with this By-law and all provisions as described on the permit and accepted drawings.
- 3. Every contractor shall give notice to the Supervisor of Building Inspections:
  - a. Of intent to do work that has been ordered to be inspected during construction;
  - b. Of intent to cover work that has been ordered to be inspected prior to covering; and
  - c. When work has been completed so that a final inspection can be made.
- 4. Every contractor is responsible jointly and severally with the owner for any work actually undertaken.
- 5. When required by the Supervisor of Building Inspections, the contractor shall provide a statutory declaration that the electrical installation was constructed in accordance to the accepted plans, specifications and requirements of the Winnipeg Electrical By-law and the Winnipeg Building By-law.

# 2-040 Penalties

- 1. Any person who contravenes or disobeys, or refuses or neglects to obey, any provision of this By-law, or who fails to comply with any order, direction or notice of the Supervisor of Building Inspections, made pursuant to this By-law, is guilty of an offence and liable on summary conviction to a fine not exceeding One Thousand Dollars (\$1,000.00) in the case of an individual, or Five Thousand Dollars (\$5,000.00) in the case of a corporation, or in the case of an individual, to imprisonment for a term not exceeding six months or to both such a fine and such an imprisonment.
- 2. Where a corporation commits an offence against this By-law, each director or officer of the corporation who authorized, consented to, connived at, or knowingly permitted or acquiesced in, the doing of the act that constitutes the offence, is likewise guilty of the offence and liable, upon summary conviction, to the penalty for which provision is made in Subrule (1).
- 3. Every such person, firm or corporation shall be deemed guilty of a separate offence for each and every day during any portion of which the breach is made or continued.

4. In addition to the penalties above, any person or corporation shall be required to observe or perform such terms and conditions as a magistrate may impose.

### 2-322 General Rules

# SECTION 2 OF THE CODE IS AMENDED BY DELETING RULE 2-322 THEREFROM AND SUBSTITUTING THEREFOR THE FOLLOWING:

### **Electrical Equipment Near Gas Meters**

Where meters used to measure natural gas, manufactured gas, or liquified petroleum gases are installed indoors, arc producing electrical equipment shall not be installed within a 900 mm distance of the gas meter vent.

### Variations to Section 6 of The Code

### 6-400 Services and Service Equipment

### Metering Equipment

# SECTION 6 OF THE CODE IS AMENDED BY RENUMBERING THE PRESENT RULE 6-400 AS SUBRULE (1) AND BY ADDING THE FOLLOWING SUBRULE:

2. For determining the type of metering equipment required by the Supply Authority, reference shall be made to Supply Authority Metering Standards which shall be amendatory or additional to Rules 6-402 to 6-412 inclusive.

### Variations to Section 10 of The Code

### 10-804<u>Bonding and Grounding</u>

### Material for Bonding Conductors

# SECTION 10 OF THE CODE IS AMENDED BY DELETING PARAGRAPH (d) SUBPARAGRAPH (iii) OF RULE 10-804 AND SUBSTITUTING THEREFOR THE FOLLOWING:

(d) (iii) is installed outdoors to supply receptacles for parking stalls.

### Variations to Section 12 of The Code

### 12-300Wiring Methods

### **Exterior Exposed Wiring Rules**

# SECTION 12 OF THE CODE IS AMENDED BY RENUMBERING THE EXISTING RULE 12-300 AS SUBRULE (1) AND BY ADDING THE FOLLOWING SUBRULE:

2. Exposed overhead wiring on the exteriors of buildings and between buildings or structures on the same premises shall not be permitted, except by special permission from the designated employee.

### **Provisions for Bonding**

# SECTION 12 OF THE CODE IS FURTHER AMENDED DELETING SUBRULE (1) AND (2) OF RULE 12-2210 AND SUBSTITUTING THEREFORE THE FOLLOWING:

Metal cable trays shall be adequately bonded at intervals not exceeding 15 m and the size of bonding conductors shall be based on the maximum rating or setting of an overcurrent device in the circuits carried by the cable tray in accordance with the requirements of Rule 10-814.

### Variations to Section 22 of The Code

### **Corrosive Liquids or Vapours or Moisture**

# SECTION 22 OF THE CODE IS AMENDED BY ADDING THE FOLLOWING NEW SUB-SECTION:

### Sewage Lift and Treatment Plants

### 22-700<u>Scope</u>

- 1. Rules 22-702 to 22-710, both inclusive, apply to the installation of electrical facilities in:
  - a. Sewage Lift and Pumping Stations; and
  - b. Primary and Secondary Sewage Treatment Plants.

### 22-702Definitions

1. **Suitably cut off** means an area cut off from adjoining areas with no communication such as doors, windows or ventilation grills between the areas.

- 2. **Wet well** means the below ground location into which the raw sewage is collected prior to passing through the lift pumps or being processed in a treatment plant.
- 3. **Dry well** means the below ground location which is isolated from the wet well location so as to prevent the migration of gases and vapours into the Dry well.
- 4. **Continuous Positive Pressure Ventilation** means a ventilation system capable of maintaining a positive pressure in a room or area and changing the air in the room or area at least 6 times an hour with means for detecting ventilation failure.

# 22-704<u>Classification of Areas (see Appendix B)</u>

- 1. Except as permitted by paragraph (c) of Subrule 3 of this Rule, all below ground locations suitably cut off from locations in which sewage gases shall be classified Category 1.
- 2. All locations in which sewage gases are present shall be classified Category 2.
- 3. The following areas shall be permitted to be classified as ordinary locations:
  - a. All locations suitably cut off from a Category 2 location and not classified as a Category 1 location; and
  - b. All locations not suitably cut off from a Category 2 location but with adequate continuous positive pressure ventilation; and
  - c. Below ground dry well locations where adequate heating and ventilation is installed.

# 22-706 Wiring Method

- 1. Wiring methods in a Category 1 or a dry Category 2 location shall be in accordance with the applicable requirements of the Code.
- 2. Wiring methods in a wet or damp Category 2 location shall be in accordance with the applicable requirements of this Code except that:
  - a. Rigid steel conduit and electrical metallic tubing shall not be used;
  - b. Mineral insulated cable and aluminum sheathed cable shall be permitted to be used provided it is spaced from walls at least 12 mm, the cable has a corrosion resistant jacket and the cable connectors are suitably sealed from the corrosive atmosphere;
  - c. Liquid tight flexible metal conduit shall be permitted to be used where permitted in accordance with Rule 12-1300, provided connectors suitable for the location are used; and

d. Grounding conductors shall be insulated or otherwise protected from corrosion and the point of connection to ground, if exposed to a corrosive atmosphere, shall be protected from corrosion by a suitable sealant.

# 22-708<u>Electrical Equipment</u>

- 1. Electrical equipment installed in a Category 1 or a dry Category 2 location shall be in accordance with the applicable requirements of the Code.
- 2. Electrical equipment installed in a wet or damp Category 2 location shall be in accordance with the applicable requirements of the Code except that:
  - a. Receptacles shall be fitted with self-closing covers, and if, of the duplex type, have individual covers over each half of the receptacle;
  - b. Lighting switches shall have weatherproof covers;
  - c. Lighting fixtures shall be totally enclosed;
  - d. Unit emergency lighting equipment and emergency lighting control units with the exception of remote lamps, shall not be located in such locations;
  - e. Heating equipment shall be approved for such locations or installed outside the corrosive location;
  - f. Motors shall be totally enclosed, fan cooled and shall not incorporate dissimilar metals relative to the motor frame and connection box; and
  - g. Electrical equipment in wet well areas shall not contain devices which will cause an open arc or spark during normal operation.

# 22-710Grounding of Structural Steel

Below ground structural steel in contact with the surrounding earth shall be bonded to the system ground.

# Variations to Section 26 of The Code

# **Installations of Electrical Equipment**

# 26-700<u>General</u>

# SECTION 26 OF THE CODE IS AMENDED BY DELETING SUBRULE (13) OF RULE 26-700 AND SUBSTITUTING THEREFORE THE FOLLOWING SUBRULE:

13. Except for receptacles installed in accordance with Rule 26-702(13), receptacles located within 2 metres of washbasins in bathrooms and washrooms or located with 3 metres of bathtubs or shower stalls, shall be protected by a ground fault circuit interrupter of the Class A type.

# SECTION 26 OF THE CODE IS FURTHER AMENDED BY ADDING A NEW SUBRULE (14) TO RULE 26-700 AS FOLLOWS:

- 14. Where a sump pump is required by the Winnipeg Building By-law for the control of water from a subsurface drainage (weeping tile) system:
  - a. A receptacle shall be installed for the connection of the sump pump; and
  - b. The receptacle for the sump pump shall be supplied from a branch circuit that supplies no other outlets or equipment.

# SECTION 26 OF THE CODE IS FURTHER AMENDED BY DELETING SUBRULE (20) OF RULE 26-702 AND SUBSTITUTING THEREFORE THE FOLLOWING SUBRULE:

20. At least one receptacle shall be provided for each driveway and each car space in a garage or carport of a single-family dwelling.

### Variations to Section 60 of The Code

### 60-500 Electrical Communication Systems

### **Overhead Conductors on Poles**

# SECTION 60 OF THE CODE IS AMENDED BY RENUMBERING THE EXISTING RULE 60-500 AS SUBRULE (1) AND BY ADDING THE FOLLOWING SUBRULE:

2. Exposed overhead wiring on the exteriors of buildings and between buildings or structures on the same premises shall not be permitted, except by special permission from the designated employee.

### Variations to Section 68 of The Code

### 68-302HYDROMASSAGE BATHTUBS

# SECTION 68 OF THE CODE IS AMENDED BY ADDING A NEW SUBRULE (3) TO RULE 68-302 AS FOLLOWS:

(3)Subject to Subrule (2) and not withstanding Subrule 68-068(6), ground fault circuit interrupters shall be permitted to be closer to the hydromassage tub than 3 metres but not less than 1.5 metres from the hydromassage tub wall.

### Variations to Section 76 of The Code

### **Temporary Wiring**

# SECTION 76 OF THE CODE IS AMENDED BY DELETING RULE 76-008 THEREFROM AND SUBSTITUTING THEREFOR THE FOLLOWING:

### 76-008<u>Service Entrance Equipment</u>

- 1. Service entrance equipment shall be permitted to be in a temporary building adjacent to the construction or demolition site but if such a building is not available the equipment shall be:
  - a. Accessible to authorized persons only;
  - b. Capable of being locked; and
  - c. Protected against the weather and mechanical damage.
- 2. The temporary service if not in or on a building shall be mounted:
  - a. On a pole, or solid wood post measuring at least 89 mm X 140 mm nominal and adequately braced for services not exceeding 200 amperes; or
  - b. On a substantial pole structure for services exceeding 200 amperes; or
  - c. On an adequately braced post for services supplied from underground distribution.

# Variation to Appendix B of The Code

# SECTION 22 OF APPENDIX B IS AMENDED BY ADDING THERETO THE FOLLOWING:

### 22-704<u>Sewage Lift and Treatment Plants</u>

- a. Diagrams 11, 12, 13 and 14 detail typical installations and area classifications for sewage lift and treatment plants.
- b. Sewage lift and treatment plants produce a combination of conditions which may require specialized attention to the electrical installation. The wet well area normally contains an atmosphere of high humidity and corrosive hydrogen sulphide vapours. Abnormal hazardous conditions may occur in the west wells due to spills of chemicals, gasoline or other volatile liquids into the sewer system.

- c. An extreme hazard to personnel working in wet wells exists because of the presence of sewer gas (hydrogen sulphide). This gas is treacherous as the ability to sense it by smell is quickly lost. If a person ignores first notice of the gas, his sense will give him no further warning. If the concentration is high enough, unconsciousness and death may result.
- d. Before working in wet well locations, the air in the wet well area should be purged and ventilation with fresh air should be continued while working in the area.

### Diagrams

THE SECTION ON DIAGRAMS IS AMENDED BY ADDING THERETO THE FOLLOWING DIAGRAMS 11, 12, 13 AND 14:





Typical Sewage Lift Station (Self-Contained)



Diagram 12

Typical Sewage Lift Station (Control Building on top of wet well)



Diagram 13

Typical Sewage Lift Station (Side-by-Side)



# Diagram 14

# **Typical Sewage Treatment Plant**

### **CHAPTER 3**

The Seventeenth Edition of the Canadian Electrical Code, Part I CSA Standard C22.1-1994 Safety Standard for Electrical Installations

### The Code

The Canadian Electrical Code, Part I, Seventeenth Edition, referred to as The Code, is hereby adopted as Chapter 3 of this By-law, THE WINNIPEG ELECTRICAL BY-LAW, and is subject to the variations as set forth in Chapter 2 of this By-law.

**DONE AND PASSED** in Council assembled, this 15<sup>th</sup> day of December, A.D., 1994.